OS Hands On

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Section: 4F

Question: (3) Write a program which accepts two integers x and y. Now use exec to execute another user defined program that prints the product of x and y.

Hands_On.c:

```c
#include <sys/types.h>
#include <stdio.h>
#include <unistd.h>
#include <stdlib.h>

int main()
{
    int x, y;
    printf("Enter values for x and y\n");
    scanf("%d", &x);
    scanf("%d", &y);
    char x_str[16], y_str[16];
    sprintf(x_str, "%d", x);
    sprintf(y_str, "%d", y);
    char *args[] = {"./product", x_str, y_str, NULL};
    execvp(args[0], args);
}
```

Product.c:

```c
#include <stdio.h>
#include <unistd.h>
#include <sys/types.h>
#include <stdlib.h>

int main(int argc, char *argv[])
{
    int x = atoi(argv[1]);
    int y = atoi(argv[2]);
    printf("Product of %d and %d is: %d\n",x,y,(x * y));
```

```
    return 0;
}
```

Output:

```
vboxuser@Ubuntu:~/Desktop/OS$ gcc product.c -o product
vboxuser@Ubuntu:~/Desktop/OS$ gcc Hands_On.c
vboxuser@Ubuntu:~/Desktop/OS$ ./a.out
Enter values for x and y
20
20
Product of 20 and 20 is: 400
vboxuser@Ubuntu:~/Desktop/OS$
```